

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

6
12
10
UNITED STATES DEPARTMENT OF AGRICULTURE
Library

Library List No. 28

Washington 25, D. C., August 1946

AUDIO-VISUAL AIDS AS MEANS OF COMMUNICATION

A List of References

Selected and Summarized by John M. McNeill

Gray, H. A. Case for modern communication devices. Prog. Ed. 19: 153-157. Mar. 1942. U. S. Off. Ed. Libr.

Facts and Findings: (Summarized from other studies)

1. Silent motion pictures are superior to the more conventional teaching devices (1) for factual information; (2) for inducing longer retention; (3) for developing understanding of relationships; (4) for stimulating activity; (5) for aiding retarded pupils.

2. Sound films have additional advantages. They lower the age at which selected concepts can be taught; overcome reading handicaps; correct speech and build vocabulary; foster correct interpretations; are more stimulating.

Hutchison, C. S. Visual aids in a program of vocational agriculture. 11 p., processed. Columbus, Ohio, State University, 1939. 275.1 H97

Facts and Findings:

1. Visual aids can make learning "easier, quicker, sounder, and more interesting and enjoyable."

2. Motion pictures both present facts and develop interests and attitudes.

3. Silent films are highly flexible and adaptable in use. Sound films have the unique advantage of reproducing natural sounds, they aid in overcoming reading difficulties, but are more expensive than silent films.

4. Slides are especially adapted for presenting and explaining a procedure or series of steps.

5. Stereographs are realistic and vivid, in that they show the third dimension in photographs, but they are not adapted to group instruction.

6. The film strip is a useful aid because it is cheap, economical, and adaptable to almost any subject.

7. Photographs are valuable aids because of their concreteness and vividness.

8. Charts, graphs, diagrams, and other drawings are illustrative aids adaptable for presentation of a variety of subject data.

9. Demonstrations furnish instruction in procedures and use of materials, and are a most valuable method of visual instruction.

10. Posters are "geometrical abstracts" of scenes, actions, or ideas, useful for informing and stimulating to action.

11. Maps are useful primarily for showing geographical location and area, and serving as place-setting for facts and events.

12. Exhibits are formal displays of several other types of visual aids, and are highly useful methods of informing and instructing.

Jayne, C. D. A study of the learning and retention of materials presented by lecture and by silent film. Jour. Ed. Res. 28: 47-58. Sept. 1944. 275.8 J824

Facts and Findings:

Visual instruction, to be fully effective, should not be presented alone, but should be accompanied by other teaching procedures (lecture, discussion, questions and answers, etc.)

McKown, H. C., and Roberts, A. B. Audio-visual aids to instruction. 385 p. New York, McGraw-Hill, 1940. U. S. Off. Ed. Libr.

Facts and Findings:

1. Audio-visual (and other sensory) aids are easy to understand and master because they are concrete.

2. They capture attention more nearly completely than less concrete learning aids.

3. They stimulate curiosity and activity.

4. Visual aids should be accompanied by verbal discussion to make them fully effective.

5. They should be well selected, and not too many should be used in any one demonstration.

6. They should be adapted to the age, interests, and experience of the learner.

7. Diagrams, drawings, maps, charts, etc. are important visual aids, with special uses which cannot be met by photographic illustrations.

8. Posters are important aids because they concentrate attention on a single main idea.

9. Cartoons are similar in method to posters.

10. The value of flat pictures in visual instruction is well known. One of their chief advantages is that they can be used repeatedly, in any connection where they are appropriate.

11. The stereograph is an excellent visual aid, but is suitable mainly for individual instruction.

12. Projected still-pictures possess the fundamental values of flat pictures, plus the fact that they can be viewed by large groups of spectators at the same time.

13. Moving pictures are valuable mainly for adding the characteristics of movement and activity to pictorial aids. They portray vividly, stimulate longer remembrance, are economical in point of time required to show them, and are especially useful for persons of retarded intelligence or experience.

14. Silent films are more flexible and adaptable in use than sound films. Sound films possess the advantage of combining the auditory and visual aspects of instruction. Both are valuable instructional devices.

Moore, R. W. Visual education. Roy. Soc. Arts. Jour. 92: 496-509.

Aug. 18, 1944. 501 L847J

Facts and Findings:

1. Required characteristics of visual aids.
 - (1) High degree of reality
 - (2) Simplicity (simpler than point illustrated)
 - (3) "Should be subordinate to the main purpose of the exposition to which they contribute."
 - (4) Relevancy
 - (5) Exactness (nonessentials eliminated)
2. Visual aids must be accompanied with explanation to be fully effective.
3. Films. Short sketches as well as long films desirable. Tempo and sequence of moving pictures should not be too fast.

Mueller, A. D. Principles and methods in adult education. 428 p.

New York, Prentice-Hall, 1940. 275 1191

Ch. XIII, Visual and verbal illustration in adult education.

Facts and Findings:

1. Objects and pictures more subject to memory and recall than written or spoken words (p. 317).
2. Auditory presentation more effective than silent reading (p. 318).
3. Study of 3 methods of presenting a story to students (silent reading, oral telling, and moving picture) showed oral telling to be most effective, silent reading slightly less, and moving picture, again, slightly less (p. 318).
4. Another experiment found relative effectiveness of 4 different methods of presentation to be in following order: (1) film with oral comment; (2) film without comment; (3) silent reading; (4) oral instruction.
5. Summary of research by F. H. Freeman, et al, comparing oral and visual methods of presentation, p. 319-322.
6. Sound films distinctly superior to usual methods of teaching natural science and music to elementary school pupils (p. 322-23).
7. Same for teaching general science in junior high school (p. 323-24).
8. Sound film superior to silent film (p. 324-25).
9. Values of motion pictures in teaching (p. 326).
10. Pictures, objects, superior to motion pictures in many ways (p. 333-34).
11. Summary of findings (p. 334-35).
12. The audience factor in methods of presenting information.
 - (1) The more heterogeneous the audience, the simpler and more concrete should be the method of presentation.
 - (2) The less educated the group, the simpler and more concrete should be the method of presentation.
 - (3) The more educated and intelligent the group, the more abstract and symbolic may be the method of presentation.
 - (4) For average unselected group, visual presentation results in greater uniformity of understanding.

13. Verbal (non-visual) -illustration

- (1) Stimulates interest and attention
- (2) Clarifies understanding
- (3) Stimulates thought and discussion
- (4) Strengthens impression and aids retention
- (5) Stimulates emotional response

Ridley, W. N. Wider use of audio-visual aids in adult education for Negroes. Jour. Negro Ed. 14: 460-466. July 1945. U. S. Off. Ed. Libr.

- Facts and Findings:

Audio-visual aids enable the student to learn more quickly, more accurately, and in greater quantity. This is true especially of of educationally "disadvantaged" groups.



